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ABSTRACT

The American culture's emphasis on individualism may fail to recognize that help-seeking can be an important proactive skill in the achievement domains of school and work. While research has shown that the majority of students obtain some help from peers or instructors, the study of help-seeking as a learning strategy has been virtually neglected. This study examined how help-seeking relates to cognitive learning strategies such as elaboration, metacognition, and resource management. Data were obtained from students in biology, English literature, and social science courses at four different types of higher educational institutions. Strategy use and help-seeking information were obtained using the Motivated Strategies for Learning Questionnaire. The use of 10 cognitive strategies was assessed: rehearsal; elaboration; memory techniques; organization; metacognitive techniques of planning, monitoring, and regulating; and resource management of one's time, study environment, and self. The results indicated that students who used various cognitive strategies were also more likely to seek help when needed. This supports the view that seeking help is an alternative means of goal accomplishment to be used when the need arises. Students who were less likely to use various strategies were also less likely to seek the help they needed. (NB)

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COGNITIVE LEARNING STRATEGIES: THEIR RELATION TO PERCEIVED NEED AND HELP-SEEKING BEHAVIOR

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Our culture's stress on individualism nurtures values that stigmatize the inability to "do it oneself." We reward students for independent work and look with disfavor on those who achieve with assistance from others. This perspective views seeking help as an act of dependency, the notion that if you can't or won't succeed on your own you are stupid, lazy, or both. However, this is overly simplistic. It fails to recognize that help-seeking can be an extremely important proactive skill in the achievement domains of school and work (Ames, 1983; Nelson-LeGall et al., 1983). Evidence suggests that it occurs frequently at all but the early stages of education, students soliciting help from peers and instructors.

For example, a recent study found that 75% of freshman and sophomore college students obtained some help during a typical academic term (Knapp & Karabenick, in press). Despite its importance and frequency the study of help-seeking as a learning strategy has been virtually neglected, as indicated by recent reviews of learning strategy instructional programs (e.g., McKeachie, et al., 1985; Weinstein & Mayer, 1985). We seek to redress this by focusing on help-seeking as a learning strategy and its relation to other strategies.

Figure 1 presents a simplified model of help-seeking. The process is initiated when an individual determines that a problem exists and help is needed. The decision whether to seek help follows from the perception of need and is based on the relative costs and benefits of doing so (e.g., Gross & McMullen, 1983). Seeking assistance occurs once help is desired. It is not necessary that the process be transitive, and people may skip

steps, but it is probably quite typical.

Various factors determine whether help is ultimately sought. Several studies suggest that the most important is whether seeking help threatens one's private or public self-esteem (Fisher, et al., 1983). One relevant example is the driver who spends hours wandering around lost rather than ask somebody for directions. In educational contexts it is the student who, despite failing, is too embarrassed to ask a question in class or see his/her instructor.

Some important distinctions can be made between types of help-seeking. As shown in Table 1, we can differentiate seeking help from formal vs. informal sources and "executive" help that reduces the cost (time, effort) of achievement vs. "instrumental" help-seeking. The latter refers to obtaining just enough information or skill to achieve independently or to increase the quality of one's performance. Also shown in Table 1 are some typical help-seeking activities that occur in academic environments.

Now, how does help-seeking fit into a more general set of academic activities and how does it relate to those activities? Suppose we ask students to assume they are not performing as well as they would like and for the likelihood they would engage in a reasonably exhaustive set of academic behaviors (i.e., behavioral intentions), among which is the opportunity to seek help. A large study of college students (undertaken at Eastern Michigan University) obtained such data. Factor analyzing these likelihood ratings provides evidence for five classes of activities, shown at the top of Table 2 (from Karabenick & Knapp, 1986). Notice that two of the factors can be identified as formal and informal help-seeking, one as instrumental activities that we

might term self-help, and two dimensions identified as changes in the direction of achievement and the lowering of aspirations.

Correlations between scales, derived from unit weightings of the items loading on each factor, are shown in the lower part of the table. Most important are the positive relations between instrumental activities and help-seeking: students who intend to achieve through greater dilligence indicate they would also be more likely to ask others for help. This supports the view that academic help-seeking is an instrumental achievement activity, allbeit distinguishable from other achievement behaviors. Students who respond to failure with increased effort are more likely to seek help as well. (Also found in that study is that among the several person variables measured, individual differences in the perceived threat to self-esteem were inversely related to reports of actual help obtained during the term.)

The present study extends this general finding by examining how help-seeking relates to other learning activities in greater detail, specifically its relation to the use of cognitive learning strategies such as elaboration, metacognition, and resource management. What we would expect from the previous study is a pattern of direct relationships between the use of these strategies and help-seeking. That is, students who use cognitive strategies should, if the need arises, be more likely to seek help as well.

However, examining the relationship between the use of learning strategies and seeking help must take the degree to which students need help into consideration (cf. Figure 1). This is because the successful use of a particular strategy might actually reduce the

need for help, either offsetting the expected positive relation between strategy use and help-seeking or even resulting in an inverse relation. By independently assessing need we were able to determine which strategies reduce students' perceptions of need and which are related to help-seeking when the level of need is controlled. The total absence of previous empirical evidence or guiding theory in this area does not permit predictions for particular strategies.

Method

Data were obtained from students in biology, english literature and social science (Sociology and Psychology) courses at four different types of higher educational institutions (a research university, a comprehensive graduate school, a small liberal arts college, and a community college). Strategy use and help-seeking information were obtained using the Motivated Strategies for Learning Questionnaire (MSLQ: see McKeachie, et al., 1987; Pintrich, 1987) that was given to students at the beginning and end of the academic term. The use of 10 cognitive strategies was assessed: rehearsal, elaboration, memory techniques, organization, metacognitive techniques of planning, monitoring and regulating, and resource management of one's time, study environment, and self.

A five-item scale included in the MSLQ at the beginning of the term measured students' typical use of help-seeking, contingent on need, from both formal and informal sources (e.g., When I can't understand the material in a course, I ask another student for help. I try to get help with my study skills when I'm having difficulty in my courses.). Need for help and actual help-seeking activities were measured at the term's conclusion.

A two-item scale ascertained students' perceived need for help with their courses and general study skills. On a three item scale, students reported the degree to which they obtained help from their instructors, other students, and from instructional support staff during the term. All item intercorrelations within scales justified combining items. Validation of the need scale is indicated by its inverse relation with students' course grade ($r(539) = -.33$. $p < .001$).

Results and Discussion

Shown in Table 3 are correlations between self-reported need, help-seeking, and the use of cognitive learning strategies. In the first column are zero-order correlations (rs) between reported typical use of help-seeking, contingent on need, and cognitive strategies obtained at the beginning of the term. Clearly, students who use cognitive strategies report a greater likelihood of seeking help when the need arises, and these data are consistent with the results shown in Table 2. The highest correlation involves elaboration ($r(539) = .13$), the notable exception to the general pattern being rehearsal ($r = .03$).

Correlations between end of term self-reported use of cognitive strategies and help-seeking are shown in the second column of Table 3. Although most are positive, some are negative. For example, the likelihood of obtaining help is higher for students who use more elaboration ($r(394) = .29$, $p < .001$) but lower for those who engage in more rehearsal ($r(394) = -.29$, $p < 001$). However, this was not unexpected since the use of strategies was predicted to decrease the level of need and alter relations

between strategy use and help-seeking. This expectation concerning need and strategy use was confirmed as shown in column three of Table 3 which reveals an inverse relation between the use of strategies and the perception of need for nine of the 10 strategies, especially that of rehearsal ($r(539) = -.44$ $p < .001$). The only exception to this pattern is the positive relation between elaboration and need (although not significant). The substantial negative relation between rehearsal and help-seeking is apparently due primarily to its reducing the perceived need of students using that strategy. To some degree this pertains as well to the use of organization and monitoring.

The relationship between the use of each strategy and help-seeking, taking into account individual differences in need, is given by the first-order partial correlations in the last column of Table 3. Controlling for level of need, the more that students use cognitive strageties the more likely they are to seek help when required. This is most true for the use of elaboration and resource and time management (rs of .31, .28, and .27, respectively). In the only exception, students who are higher in the use of rehearsal are less likely to seek help, controlling for level of need.

It is interesting to compare the degree of help students reported they would engage in if they needed help (given at the beginning of the term) with their self-reported help-seeking reported at its conclusion, controlling for level of need (the first and last columns of Table 3). The order of magnitude of relations between the use of various strategies is virtually the same which suggests that students' reports of contingent help-seeking

(i.e., given a state of need) are good indicators of their actual behavior when levels of need is statistically controlled.

In sum, the results quite clearly indicate that students who use various cognitive strategies are also more likely to seek help when needed. This supports the view that, in academic settings (as well as in other areas of achievement), seeking help is an alternative means of goal accomplishment to be used when the need arises. And students who make use of learning strategies in general appear less reluctant to use that strategy as well. Perhaps more importantly, students who are less likely to use various stragegies are also less likely to seek the help they need. This may be due to their being less skilled in identifying their need or in deciding not to seek help because of its high threat to their self-esteem. Such students are thus doubly handicapped, and serious consideration might be given to providing help-seeking training to students at risk as well as its inclusion as a segment of learning strategy instructional programs.

Among the intriguing questions raised by the present study is the different pattern of need and help-seeking relationships found for rehearsal and elaboration strategies. These scales are relatively independent of each other (r = .06) and have substantially different associations with help-seeking. The reason for this may be in the types of students who employ these strategies, especially their motivational, interest and value characteristics, but might as well lie in individual differences in self-esteem threat. The role of self-esteem threat and its relation to the use of learning strategies is the subject

of further research. Future studies will also examine whether different patterns of relationships obtain when distinctions are made between formal and informal and between executive and instrumental help-seeking behavior.

REFERENCES

Ames, R. (1983). Help-seeking and achievement orientation: Perspectives from attribution theory. In B. M. DePaulo, Nadler. A., & J. D. Fisher (Eds.), ew directions in helping (Vol. 2): Help-seeking. New York: Academic Press.

Ames, R., & Lau, S. (1982). An attributional analysis of help-seeking in academic settings. Journal of Educational Psychology, 74, 414-423.

DePaulo, B. M., Nadler, A., & Fisher, J. D. (Eds.). (1983). New directions in helping (Vol. 2): Help-seeking. New York: Academic Press.

Frey, K. S., & Ruble, D. N. (1985). What children say when the teacher is not around: Conflicting goals in social comparison and performance assessment in the classroom. Journal of Personality and Social Psychology, 48, 550-562.

Karabenick, S. A., & Knapp, J. R. (1986). Incidence and correlates of academic help-seeking in higher education. Unpublished manuscript, Eastern Michigan University.

Knapp, J. R., & Karabenick, S. A. (In press). Incidence of formal and informal help-seeking in higher education. Journal of College Student Personnel.

McKeachie, W. J., Pintrich, P. R., & Lin, Y. (1985). Teaching learning strategies Educational Psychologist, 20, 153-160.

McKeachie, W. J., Pintrich, P. R., Lin, Y., & Smith, D. (1986). Teaching and learning in the college classroom: A review of the literature. Ann Arbor, MI; National Center for Research to Improve Postsecondary Teaching and Learning (NCRIPTAL), The University of Michigan.

Nelson-LeGall, S., Gumerman, R. A., & Scott-Jones, D. (1983). Instrumental help-seeking and everyday problem-solving: A developmental perspective. In B. M. DePaulo, A. Nadler, & J. D. Fisher (Eds.), New directions in helping (Vol. 2): Help-seeking. New York: Academic Press.

Pintrich, P. R. Motivated learning strategies in the college classroom. (1987). Paper presented at the American Educational Research Association Convention, Washington, D.C., April.

Weinstein, C. E. & Mayer, R. E. (1985). The teaching of learning strategies. In M. C. Wittrock (Ed.), Handbook of research on teaching, Third Ed., New York: Macmillan.

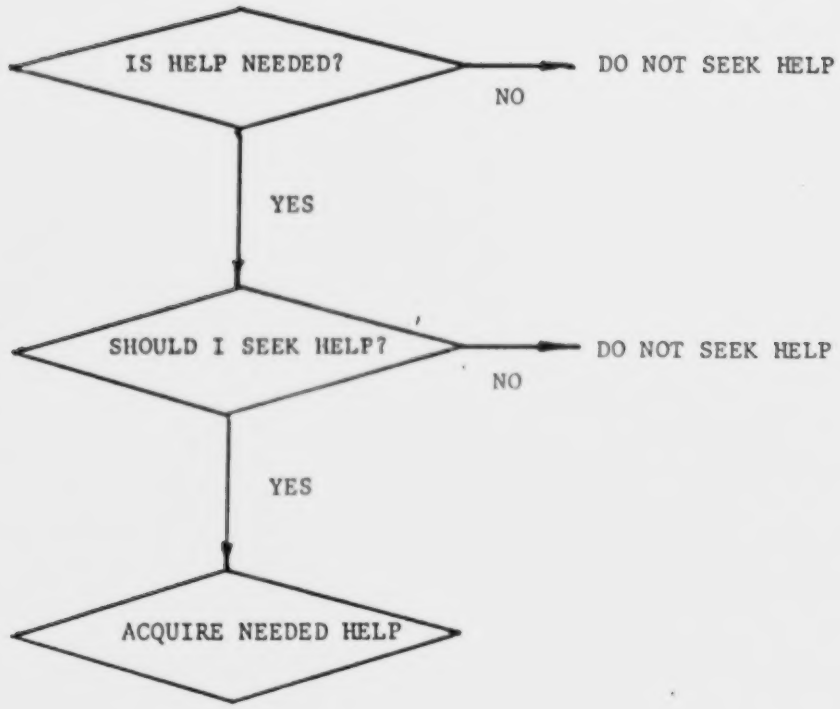

FIGURE 1. THE BASIC HELP-SEEKING PROCESS

TABLE 1

DISTINCTIONS BETWEEN DIFFERENT TYPES OF HELP-SEEKING

DISTINCTION BASED ON THE SOURCE OF HELP

FORMAL HELP-SEEKING: Institutional Sources
e.g. Study Skills Centers
Instructors
Tutors

INFORMAL HELP-SEEKING: Non-Institutional Sources
e.g. Students in Classes
Other Student Acquaintances
Friends (Non-Student)
Family Members

DISTINCTION BASED ON THE GOAL OF HELP-SEEKING

NECESSARY vs. CONVENIENT HELP: Can the goal be achieved with or without help? Necessary if it cannot be achieved w/o assistance. Convenient if it can be but the person opts to lower the cost of goal achievement.

INSTRUMENTAL vs. EXECUTIVE HELP-SEEKING: Executive help-seeking is similar to convenient in that the goal is to lower the cost of achievement. Instrumental refers to seeking help just sufficient to achieve independently or to improve the quality of performance (e.g. not being given the answer to a math problem but rather the skills with which it can be solved).

SOME TYPICAL HELP-SEEKING ACTIVITIES

You ask a student in your class to explain a homework problem.
You ask your instructor to explain a section of the reading assignment.
You ask to see a tutor at the Instructional Support Center.
You ask a reference librarian where to find a certain book.
You raise your hand in class to ask for clarification on an aspect of your instructor's lecture.

TABLE 2

BEHAVIORAL INTENTIONS WHEN PERFOMING LESS WELL THAN DESIRED (COLLEGE STUDENTS)
FACTOR STRUCTURE OF LIKELIHOOD RATINGS - ROTATED (VARIMAX) FACTOR LOADINGS (> .40)

Behavioral Intention	Help-Seeking Formal	Help-Seeking Informal	Instrum. Activ.	Alter Goals	Lower Aspirat.
Get help from instructor	-.67				
Get help from support serv.	-.68				
Ask more questions in class	-.65				
Go to career placement	-.65				
Get help from another student		-.48			
Select helpful instructors		-.60			
Get help from friends		-.69			
Try harder			.60		
Study more			.78		
Attend class more regularly			.69		
Change minor or major				.88	
Change career goals				.91	
Change schools				.43	
Lower academic aspirations					.56
Select easier courses					.65
Drop courses this term					.81
Take lighter load next term					.78

Note: Data based on N = 612 Introductory Psychology students at EMU

CORRELATIONS AMONG INTENTION FACTORS

Factor	1	2	3	4
1. Formal Help-Seeking	--			
2. Informal Help-Seeking	.39[b]	--		
3. Instrumental Activities (Self-help)	.44[b]	.26[b]	--	
4. Alter Goals	.06	.09[a]	-.05	--
5. Lower Aspirations	.01	.21[b]	-.09[a]	.33[b]

[a] $p < .05$ [b] $p < .001$

TABLE 3

RELATIONSHIPS BETWEEN THE USE OF LEARNING STRATEGIES, PERCEIVED ACADEMIC NEED AND HELP-SEEKING BEHAVIOR

STRATEGY	CONTINGENT HELP-SEEKING (MSLQ PRE-TEST)	REPORTED HELP-SEEKING (MSLQ POST-TEST)	PERCEIVED NEED	HELP-SEEKING WITH NEED CONTROLLED
Rehearsal	.03	-.29[c]	-.44[c]	-.07
Elaboration	.36[c]	.29[c]	.05	.31[c]
Memory Techniques	.30[c]	.13[b]	-.06	.19[b]
Organization	.10[a]	-.14[b]	-.36[c]	.07
Metacognition:				
Planning	.24[c]	.18[b]	-.02	.23[c]
Monitoring	.20[c]	-.09[a]	-.31[c]	.10[a]
Regulating	.19[c]	.12[a]	-.10[a]	.21[c]
Resource Management:				
Time	.19[c]	.12[a]	-.21[c]	.28[c]
Study Environment	.13[b]	.11[a]	-.08	.18[b]
Self	.21[c]	.10[a]	-.22[c]	.27[c]

[a] $p < .05$ [b] $p < .01$ [c] $p < .001$

Note: df=539 for MSLQ pre-test and 394 for MSLQ post-test